CLAIMS

1. A method of acquiring a network address in a communications network, the method comprising the steps of:

establishing an entity comprising information on network addresses within a subnetwork;

creating a link with a link identifier unique within the subnetwork between a first node and a second node;

determining a network address for the first node on the basis of the link identifier;

checking by the entity whether the determined network address is unique; and

accepting the network address if the determined network address is unique.

2. A method according to claim 1 in which the link identifier is generated statically based on information identifying one of the nodes.

3. A method according to claim 1 in which the link identifier is generated randomly by one of the nodes.

4. A method according to ~~any preceding~~ claim in which the information on network addresses is a list of link identifiers or network addresses in the subnetwork.

5. A method according to claim 4 in which the list comprises link identifiers which have previously been assigned to nodes.

6. A method according to claim 5 in which uniqueness checking is accomplished by the entity referring to the list of previously assigned link identifiers or network addresses.

7. A method according to claim 6 in which uniqueness checking is carried out by the entity referring to a routing table.

8. A method according to claim 6 in which uniqueness checking is carried out by the entity referring to a neighbour cache.

9. A method according to claim 4 in which the list comprises link identifiers which are unique and has not previously been assigned.

10. A method according to claim 9 in which uniqueness checking is accomplished by the gateway selecting a link identifier or a network address from the list of link identifiers or network addresses which have not yet been assigned.

11. A method according to ~~any preceding~~ claim 1 in which the information is that the entity has an identifier which can used to create a unique network address.

12. A method according to claim 11 in which uniqueness checking is accomplished by the entity referring to the information on network addresses it contains and determining that it has a link identifier which can used to create a unique network address.

13. A method according to ~~any preceding~~ claim 1 in which the link identifier is transferred between the first and the second nodes from a sender to a recipient.

14. A method according to claim 13 in which the recipient of the link identifier discards it and generates a different link identifier which is checked for uniqueness.

15. A method according to claim 13 in which if the link identifier is not unique, the recipient chooses a unique link identifier which it sends to the sender.

16. A method according to ~~any preceding~~ claim 1 in which the network address is derived from the link identifier and a network prefix.

17. A method according to claim 16 in which the network prefix is obtained by means of a router solicitation sent between the first and second nodes.

18. A method according to claim 16 in which the network prefix is obtained by means of a router advertisement which is sent automatically between the first and the second node.

19. A method according to ~~any of~~ claims 16 ~~to 18~~ in which there are a plurality of network prefixes used to create a plurality of network addresses for a node.

20. A method according to ~~any preceding~~ claim in which the communications network comprises a plurality of subnetworks.

21. A method according to ~~any preceding~~ claim in which the first node is a mobile station.

22. A method according to ~~any preceding~~ claim in which the second node is a gateway.

23. A method according to ~~any preceding~~ claim in which the communications network is a GPRS system.

24. A method according to claim 12 in which the link is a PDP context.

25. A method according to ~~any preceding~~ claim in which the network address is an IPv6 address.

26. A communications network comprising:
a subnetwork;
a first node and a second node;
an entity comprising information on network addresses within the subnetwork, the entity being able to create a link with a link identifier unique within the subnetwork between the first node and the second node and to determine a network address for the first node on the basis of the link identifier;

wherein the entity is able to check whether the determined network address is unique and to accept the network address if the determined network address is unique.

27. A mobile terminal to operate with the communications network of claim 26.